

# **BookletChart<sup>TM</sup>**

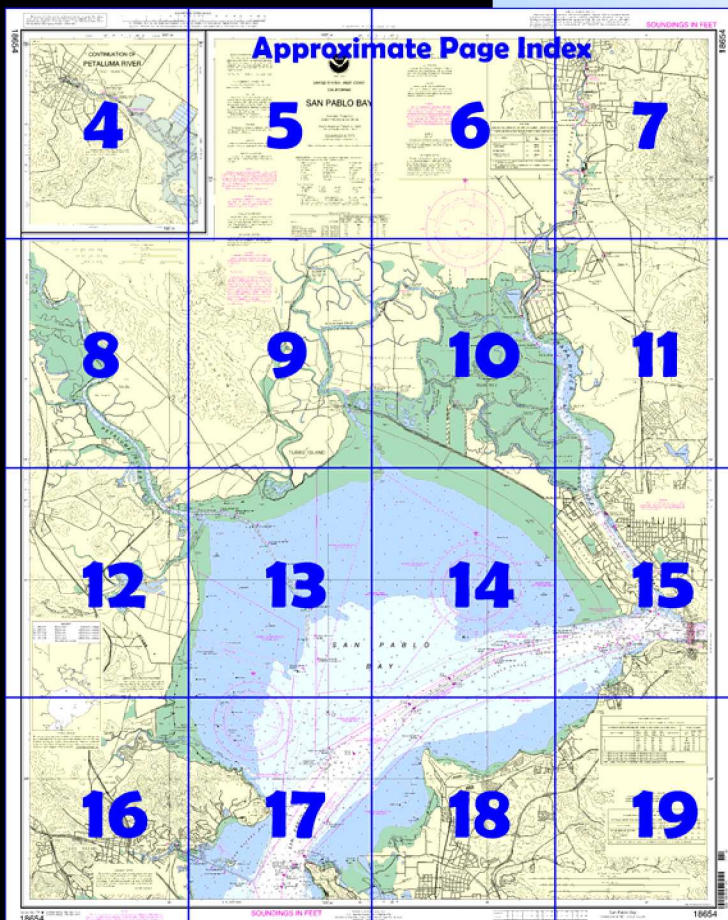
## **San Pablo Bay**

(NOAA Chart 18654)



A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ☒ Complete, reduced scale nautical chart
- ☒ Print at home for free
- ☒ Convenient size
- ☒ Up to date with all Notices to Mariners
- ☒ United States Coast Pilot excerpts
- ☒ Compiled by NOAA, the nation's chartmaker.



*Home Edition (not for sale)*



### What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

### What is a BookletChart™?

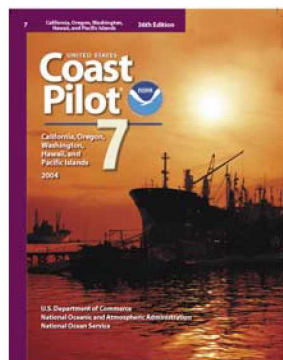
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

### Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



### [Coast Pilot 7, Chapter 7 excerpts]

(479) **San Pablo Bay**, is nearly circular, 10 miles long in a NE direction, with a greatest width of 8 miles. The N part consists of low marshes intersected by numerous sloughs and a large area of shoal water and mudflats that bare at extreme low water. The S shore is bolder, except between Point San Pablo and Pinole Point, where it is low and marshy for about 3 miles. Carquinez Strait joins San Pablo Bay with Mare Island Strait and Suisun Bay at its E extremity. There

is considerable traffic through the bay. Deep-draft oil tankers and sugar-laden vessels pass through the bay bound for Crockett and Martinez. Lighter draft vessels pass through bound for points on Suisun Bay, and the Sacramento River to Sacramento, and on the San Joaquin River to Stockton.

(484) **Pinole Point** is a moderately high, rocky bluff, projecting about 1 mile from the SE shore of San Pablo Bay. A T-head fishing pier extends NW from the E side of the point. Piles and a light are off the face of the pier. The ruins of a former wharf extend from the E side of the point, and numerous oil tanks are on the hills about 2 miles in back of it. About 3.5 miles E of Pinole Point, the black and white tank at a chemical fertilizer plant is prominent. A pleasure fishing pier and a small-craft harbor are at **Lone Tree Point**, 4.6 miles E from Pinole Point. A steel skeleton tower is 0.6 mile S of Lone Tree Point. **Oleum**, on **Davis Point**, is an oil town. There are many prominent oil tanks, painted in pastel colors, on the hills back of the town. Six stacks in a line SE of Davis Point are also prominent.

(488) **Gallinas Creek** enters San Pablo Bay about 1.5 miles NW of Point San Pedro. The entrance channel, marked by private markers on the N side, leads across flats to the mouth of the creek. In April 1983, the channel had a controlling depth of 2 feet. Local knowledge is advised. Overhead cables crossing the creek have a minimum clearance of 65 feet.

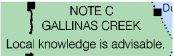
(489) **Petaluma River** enters San Pablo Bay on the NW side. The city of **Petaluma**, 12 miles above the mouth, is the center of an extensive dairy and egg industry. The river is used by pleasure craft and by barges handling gravel, oyster shell, heavy construction equipment, and prestressed concrete products.

(502) **Napa River**, the continuation of Mare Island Strait above the naval shipyard, is used by barges and pleasure boats. Barge traffic on the river is in crushed rock, salt, and steel. A dredged channel leads from the Vallejo-Mare Island Causeway Bridge to a turning basin at **Jacks Bend**, thence to the head of navigation at the 3rd Street Bridge in **Napa**, 13 miles above the causeway bridge. In April 1999, the midchannel controlling depth was 8 feet from the Vallejo-Mare Island Causeway Bridge to **Horseshoe Bend**. A Federal project provides a depth of 10 feet from Horseshoe Bend to the upstream limit of the channel. Napa River is marked to Horseshoe Bend by a buoy and daybeacon, lights, and a **183°** lighted range.

(506) A small-craft basin is on the W side of Napa River opposite **Bull Island**, 8 miles above the Vallejo-Mare Island Causeway, and several other small-craft facilities are elsewhere on the river.



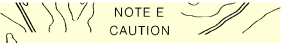
# Table of Selected Chart Notes



Corrected through NM Jan. 26/08  
Corrected through LNM Jan. 15/08

## HEIGHTS

Heights in feet above Mean High Water.



## MINERAL DEVELOPMENT STRUCTURES

Obstruction lights and sound (fog) signals are required for fixed mineral development structures shown on this chart, subject to approval by the District Commander, U.S. Coast Guard (33 CFR 67).

Mercator Projection  
Scale 1:40,000 at Lat 38°08'

North American Datum of 1983  
(World Geodetic System 1984)

SOUNDINGS IN FEET  
AT MEAN LOWER LOW WATER

## CAUTION

**SUBMARINE PIPELINES AND CABLES**  
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:



Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.  
Covered wells may be marked by lighted or unlighted buoys.

## RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

## CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

## HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.292" southward and 3.910" westward to agree with this chart.

## CAUTION

### BASCULE BRIDGE CLEARANCES

For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

## CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

## WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

## POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

## AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

## NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Mt. Pise, CA KHB-49 162.40 MHz WX2

## NOTE D

### CAUTION

Mariners are warned that numerous uncharted piles, snags, pipes, shoals, obstructions, and wrecks, some submerged, may exist along the edge of the waterway.

## SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 7 for important supplemental information.

## AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

## CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117. Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.  
Station positions are shown thus:  
○ (Accurate location) ◌ (Approximate location)

## PINOLE SHOAL CHANNEL

Vessels weighing less than 1600 gross tons or tugs with tows weighing less than 1600 gross tons are not permitted to enter or cross over Pinole Shoal dredged channel.

## NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 11th Coast Guard District in Alameda, California or at the Office of the District Engineer, Corps of Engineers in San Francisco, California.  
Refer to charted regulation section numbers.

## SAN RAFAEL CREEK

The controlling depth was 3 feet for a mid-width of 50 feet from the channel entrance 37°57'30"N, 122°27'34"W, to the mouth of San Rafael Creek; thence 3 feet for a width of 30 feet to the turning basin, 4 feet in the turning basin centered at 37°58'08"N, 122°31'03"W, thence 2 feet for a width of 60 feet to the Grand Ave. Bridge, except for shoal to bare for last 125 feet.

Jan 2008

Additional information can be obtained at [nauticalcharts.noaa.gov](http://nauticalcharts.noaa.gov).

## SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot,

NAPA RIVER			
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO APR 1999			
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)			
NAME OF CHANNEL	DEPTH MLLW (FEET)	WIDTH (FEET)	DATE OF SURVEY
HORSESHOE BEND TO BASIN AT JACKS BEND	7.2	MIDDLE 50 FT	4-99
TURNING BASIN	6.9	100-250	4-99
THENCE TO HEAD OF NAVIGATION (GRD ST.)	A4.6	MIDDLE 50 FT	4-99
A. SHOALING TO 2.5 FEET AROUND BEND AT 38°17'43"N, 122°16'55"W AND TO 4.0 FEET AT 38°17'50"N, 122°16'57"W. NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGING CONDITIONS SUBSEQUENT TO THE ABOVE.			

## CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at [nauticalcharts.noaa.gov](http://nauticalcharts.noaa.gov).

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)  
Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rot rotating
B black	Iso isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

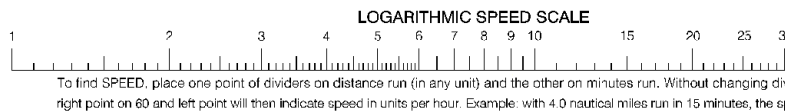
## Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

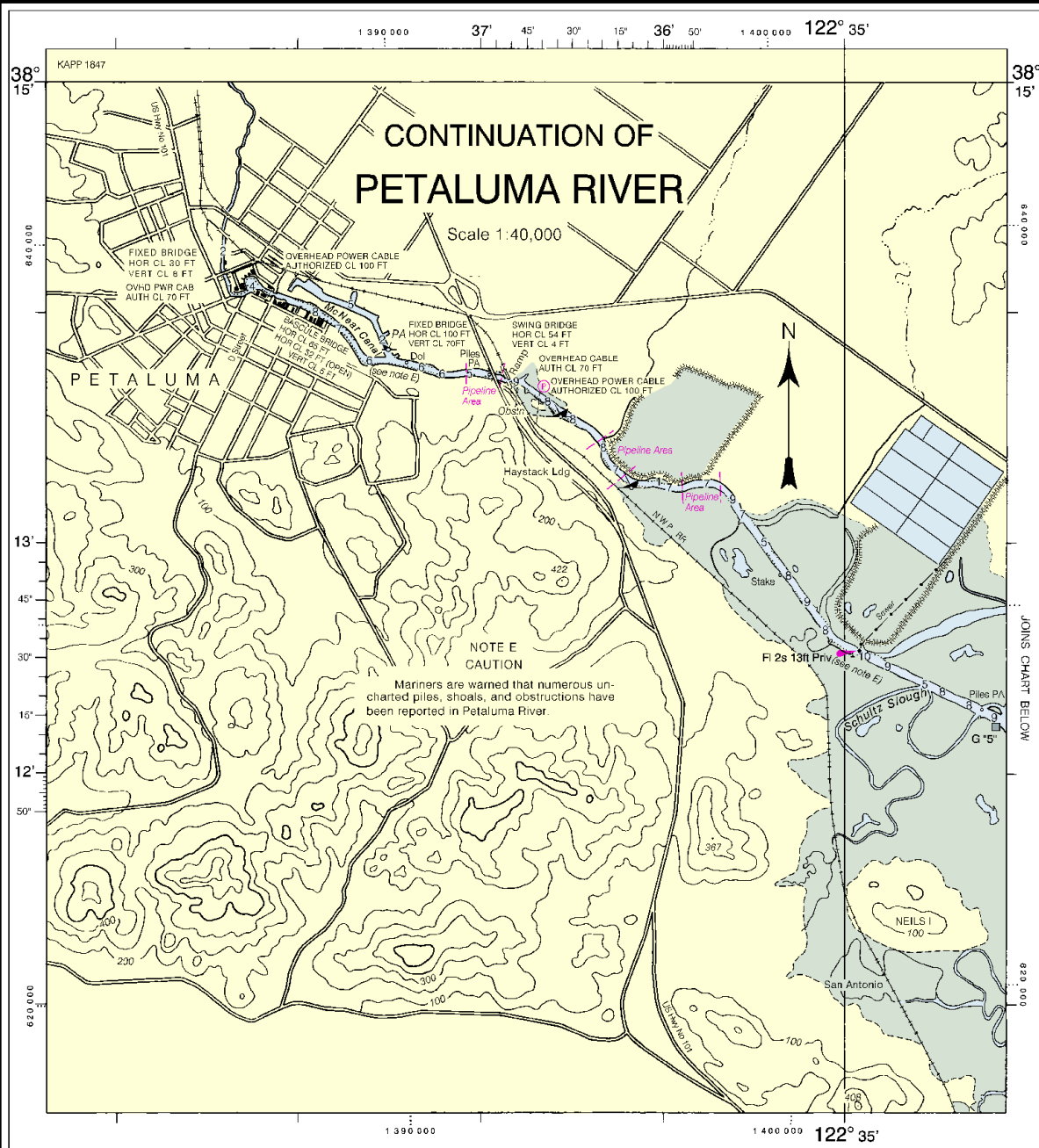
## Miscellaneous:

AUTH authorized	Obstrn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	
① Wreck, rock, obstruction, or shoal swept clear to the depth indicated.			
② Rocks that cover and uncover, with heights in feet above datum of soundings.			

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3292.



18654



NOAA WEA  
The NOAA below provides The reception nautical miles as much as 11 high elevation Mt. Ple, CA

SUPPLE  
Consult U. supplemental i

Limitations:  
aids to marine  
U.S. Coast G  
Geospatial-Inte  
Radio direct  
broadcasting  
should be use  
Station posi  
○(Accurate lo

Tempor  
navigat on are  
Local Notice to

Improved of  
subject to show

Consult U  
supplemental  
navigation.

Navigation regul  
Coast Pilot 7. Addit  
lished in the Notice to  
regulations may be of  
11th Coast Guard D  
Office of the Distri  
San Francisco, Calif  
Refer to chart

The prude  
any single air  
floating aids  
and U.S. Coast

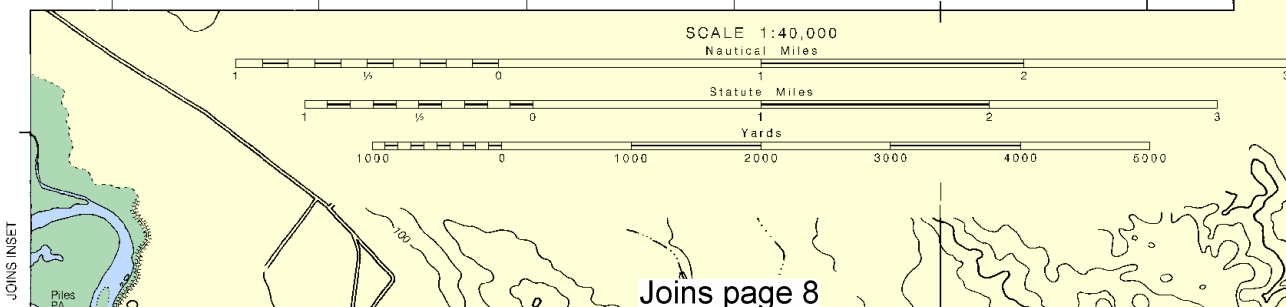
PC  
Report all  
stances to the  
1-800-424-88C  
Coast Guard if  
is impossible (

R.  
Radar reflex  
floating aids i  
reflector ident  
omitted from t

SUBMARIN  
Charred sut  
cables and sut  
are shown as:

Pipeline Area

Additional u  
submarine ca  
this chart. Not  
marine cables



4



Printed at reduced scale.

SCALE 1:40,000  
Nautical Miles

See Note on page 5.





30 40 50 60  
divider spread, place  
speed is 16.0 knots.

Formerly C&GS 5533, 1st Ed., Jan. 1906 G-1954-861 KAPP 1846

122° 25'

24' 45' 30' 15' 23' 50'

**WEATHER RADIO BROADCASTS**  
AA Weather Radio station listed  
continuous weather broadcasts  
ion range is typically 20 to 40  
is from the antenna site, but can be  
100 nautical miles for stations at  
ons.

X KHB-49 162.40 MHz WX2

**MENTAL INFORMATION**  
U.S. Coast Pilot 7 for important  
il information.

**CAUTION**  
ons on the use of radio signals as  
ine navigation can be found in the  
Guard Light Lists and National  
intelligence Agency Publication 117.  
action-finder bearings to commercial  
ig stations are subject to error and  
iscd with caution.  
ositions are shown thus:  
location) o(Approximate location)

**CAUTION**  
rary changes or defects in aids to  
re not indicated on this chart. See  
s to Mariners.

**CAUTION**  
channels shown by broken lines are  
hoaling, particularly at the edges.

**AIDS TO NAVIGATION**  
: U.S. Coast Guard Light List for  
ial information concerning aids to

**NOTE A**  
gulations are published in Chapter 2, U.S.  
ditions or revisions to Chapter 2 are pub-  
s to Mariners. Information concerning the  
obtained at the Office of the Commander,  
District in Alameda, California or at the  
trict Engineer, Corps of Engineers in  
alifornia.  
ed regulation section numbers.

**WARNING**  
dent mariner will not rely solely on  
aid to navigation, particularly on  
s. See U.S. Coast Guard Light List  
ast Pilot for details.

**POLLUTION REPORTS**  
ill spill s of oil and hazardous sub-  
the National Response Center via  
802 (toll free), or to the nearest U.S.  
facility if telephone communication  
e (33 CFR 153).

**RADAR REFLECTORS**  
lectors have been placed on many  
s to navigation. Individual radar  
ntification on these aids has been  
n this chart.

**CAUTION**  
**PIPE PIPELINES AND CABLES**  
submarine pipelines and submarine  
submarine pipeline and cable areas  
c

Area Cable Area

il uncharted submarine pipelines and  
cables may exist within the area of  
lot all submarine pipelines and sub-  
s. are required to be buried, and



THE NATION'S CHARTMAKER SINCE 1807

## UNITED STATES - WEST COAST CALIFORNIA

# SAN PABLO BAY

Mercator Projection  
Scale 1:40,000 at Lat 38°08'

North American Datum of 1983  
(World Geodetic System 1984)

SOUNDINGS IN FEET  
AT MEAN LOWER LOW WATER

Additional information can be obtained at [nauticalcharts.noaa.gov](http://nauticalcharts.noaa.gov).

### HEIGHTS

Heights in feet above Mean High Water.

### AUTHORITIES

Hydrography and topography by the National  
Ocean Service, Coast Survey, with additional  
data from the Corps of Engineers, Geological  
Survey, and U.S. Coast Guard.

### CAUTION

#### BASCULE BRIDGE CLEARANCES

For bascule bridges, whose spans do not  
open to a full upright or vertical position, unlimited  
vertical clearance is not available for the entire  
charted horizontal clearance.

### NOTE B

The U.S. Coast Guard operates a mandatory  
Vessel Traffic Services (VTS) system in the San  
Francisco Bay and surrounding areas. Vessel  
operating procedures and designated radiotele-  
phone frequencies are published in 33 CFR 161,  
the U.S. Coast Pilot, and/or the VTS User's Manual.  
All of the San Pablo Bay is within the VTS area  
with the exception of the Petaluma River Entrance  
Channel.

### NOTE D

#### CAUTION

Mariners are warned that numerous uncharted  
piles, snags, pipes, shoals, obstructions, and  
wrecks, some submerged, may exist along the  
edge of the waterway.

### HORIZONTAL DATUM

The horizontal reference datum of this chart  
is North American Datum of 1983 (NAD 83), which  
for charting purposes is considered equivalent  
to the World Geodetic System 1984 (WGS 84).  
Geographic positions referred to the North  
American Datum of 1927 must be corrected an  
average of 0.292' southward and 3.910'  
westward to agree with this chart.

**ABBREVIATIONS** (For complete list of Symbols and Abbreviations, see Chart No. 1.)  
Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IO interrupted quick	N nun	Rot rotating
B black	iso isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mk marker	Ra Ref radar reflector	WHIS whistle
		Rn radiobeacon	Y yellow

#### Bottom characteristics:

Bls boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	ln hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

#### Miscellaneous:

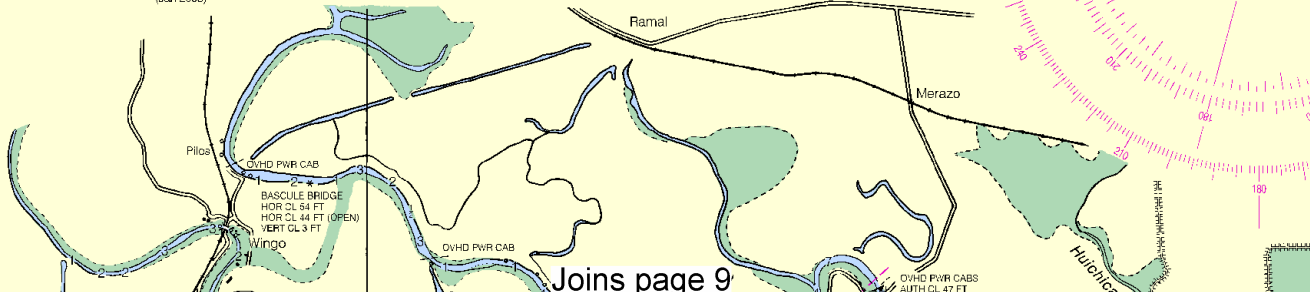
AUTH authorized	Obstr obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	
21 Wreck, rock, obstruction, or shoal swept clear to the depth indicated.			
(2) Rocks that cover and uncover, with heights in foot above datum of soundings.			

### TIDAL INFORMATION

NAME	PLACE (LAT/LONG)	Height referred to datum of soundings (MLLW)		
		Mean High Water	Mean High Water	Mean Low Water
Point Orient	(37°58'N/122°28'W)	foot	foot	foot
Hercules, Refugio Landing	(38°01'N/122°18'W)	6.3	5.4	1.1
Mare Island, Carquinez Strait	(38°04'N/122°15'W)	6.1	5.5	1.0
Petaluma River Entrance	(38°07'N/122°30'W)	5.9	5.3	1.0
Sonoma Creek	(38°08'N/122°24'W)	6.1	5.6	1.0
		5.0	5.0	0.8

Dashes (---) located in datum column indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from <http://tidesandcurrents.noaa.gov>.

(Jan 2006)



This BookletChart was reduced to 75% of the original chart scale.  
The new scale is 1:53333. Barscales have also been reduced and  
are accurate when used to measure distances in this BookletChart.



THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - WEST COAST

CALIFORNIA

# SAN PABLO BAY

Mercator Projection  
Scale 1:40,000 at Lat 38°08'

North American Datum of 1983  
(World Geodetic System 1984)

SOUNDINGS IN FEET  
AT MEAN LOWER LOW WATER

Additional information can be obtained at [nauticalcharts.noaa.gov](http://nauticalcharts.noaa.gov).

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)  
Aids to Navigation (lights are white unless otherwise indicated):

AERO: aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rot rotating
B black	Is isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mk marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

## Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters	so soft
Bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

## Miscellaneous:

AUTH authorized	Obstn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	
21 Wreck, rock, obstruction, or shoal swept clear to the depth indicated.			
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.			

## TIDAL INFORMATION

NAME	PLACE (LAT/LONG)	Height referred to datum of soundings (MLLW)		
		Mean Higher High Water	Mean High Water	Mean Low Water
Point Orient	(37°58'N/122°26'W)	Foot	Foot	Foot
Hercules, Refugio Landing	(38°01'N/122°18'W)	6.0	5.4	1.1
Mare Island, Carquinez Strait	(38°04'N/122°15'W)	6.1	5.5	1.0
Petaluma River Entrance	(38°07'N/122°30'W)	5.9	5.3	1.0
Sonoma Creek	(38°09'N/122°24'W)	6.1	5.6	1.0
		5.6	5.0	0.8

Dashes (---) located in datum column indicate unavailable datum values for a tide station. Real time water levels, tide predictions, and tidal current predictions are available on the Internet from <http://tidesandcurrents.noaa.gov>.

(Jan 2006)

## HEIGHTS

Heights in feet above Mean High Water.

## AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

## CAUTION

## BASCULE BRIDGE CLEARANCES

For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

## NOTE B

The U.S. Coast Guard operates a mandatory Vessel Traffic Services (VTS) system in the San Francisco Bay and surrounding areas. Vessel operating procedures and designated radiotelephone frequencies are published in 33 CFR 161, the U.S. Coast Pilot, and/or the VTS User's Manual. All of the San Pablo Bay is within the VTS area with the exception of the Petaluma River Entrance Channel.

## NOTE D

## CAUTION

Mariners are warned that numerous uncharted piles, snags, pipes, shoals, obstructions, and wrecks, some submerged, may exist along the edge of the waterway.

## HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.292" southward and 3.910" westward to agree with this chart.

TABULATED FROM

CONTROLLING

NAME OF CHART

HORSESHOE BAY

JACKS BEND

TURNING BASIN

THENCE TO HEAD

NAVIGATION

A. SOUNDING TO

AT 38°17'50"N

NOTE - CONSULT

SUBSEQUENT

Joins page 5

Joins page 10

6

North

Printed at reduced scale.

SCALE 1:40,000

Nautical Miles

See Note on page 5.

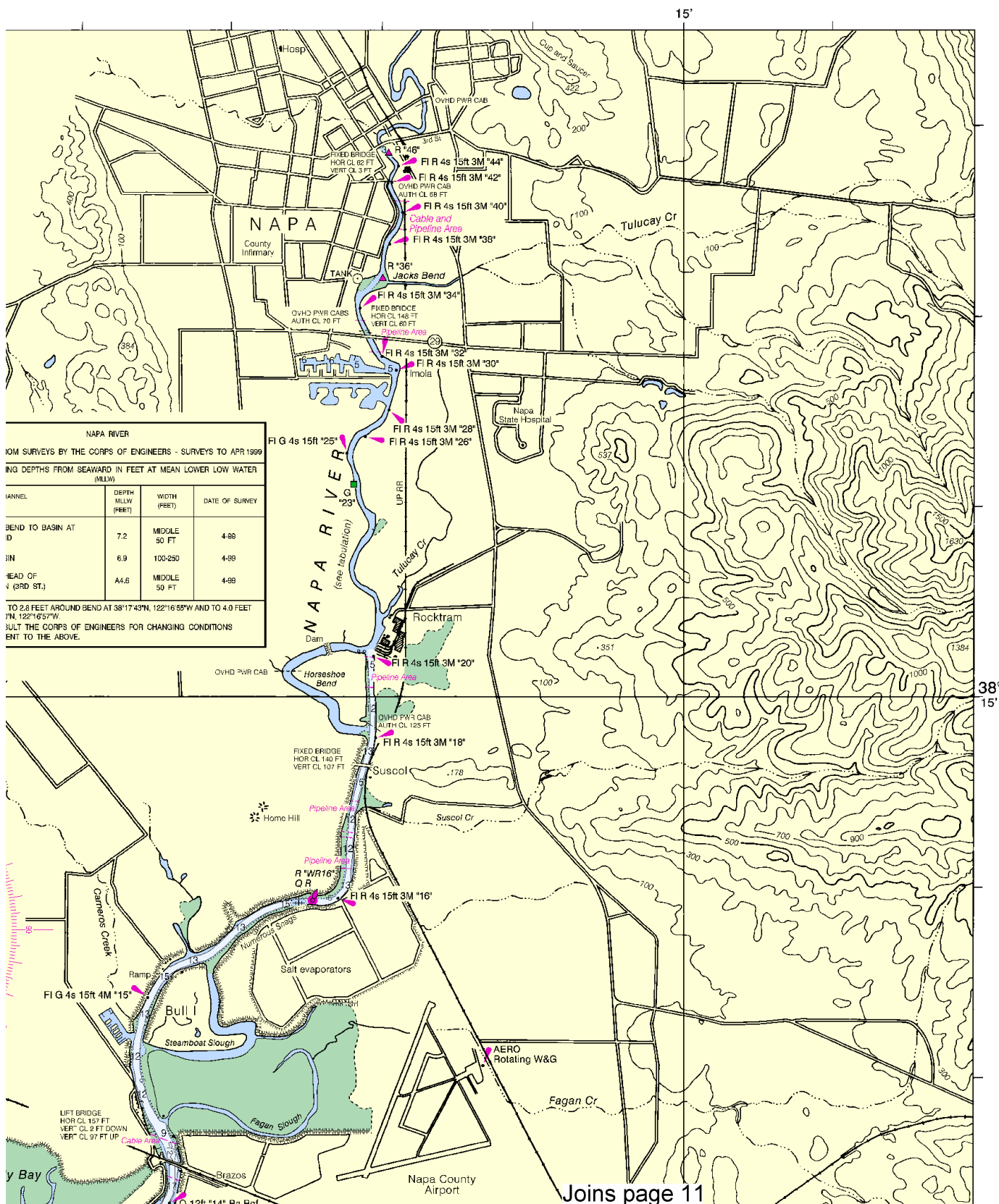




NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-800-584-4683, <http://NauticalCharts.gov>, [help@NauticalCharts.gov](mailto:help@NauticalCharts.gov), or OceanGrafix at 1-877-56CHART, <http://OceanGrafix.com>, or [help@OceanGrafix.com](mailto:help@OceanGrafix.com).

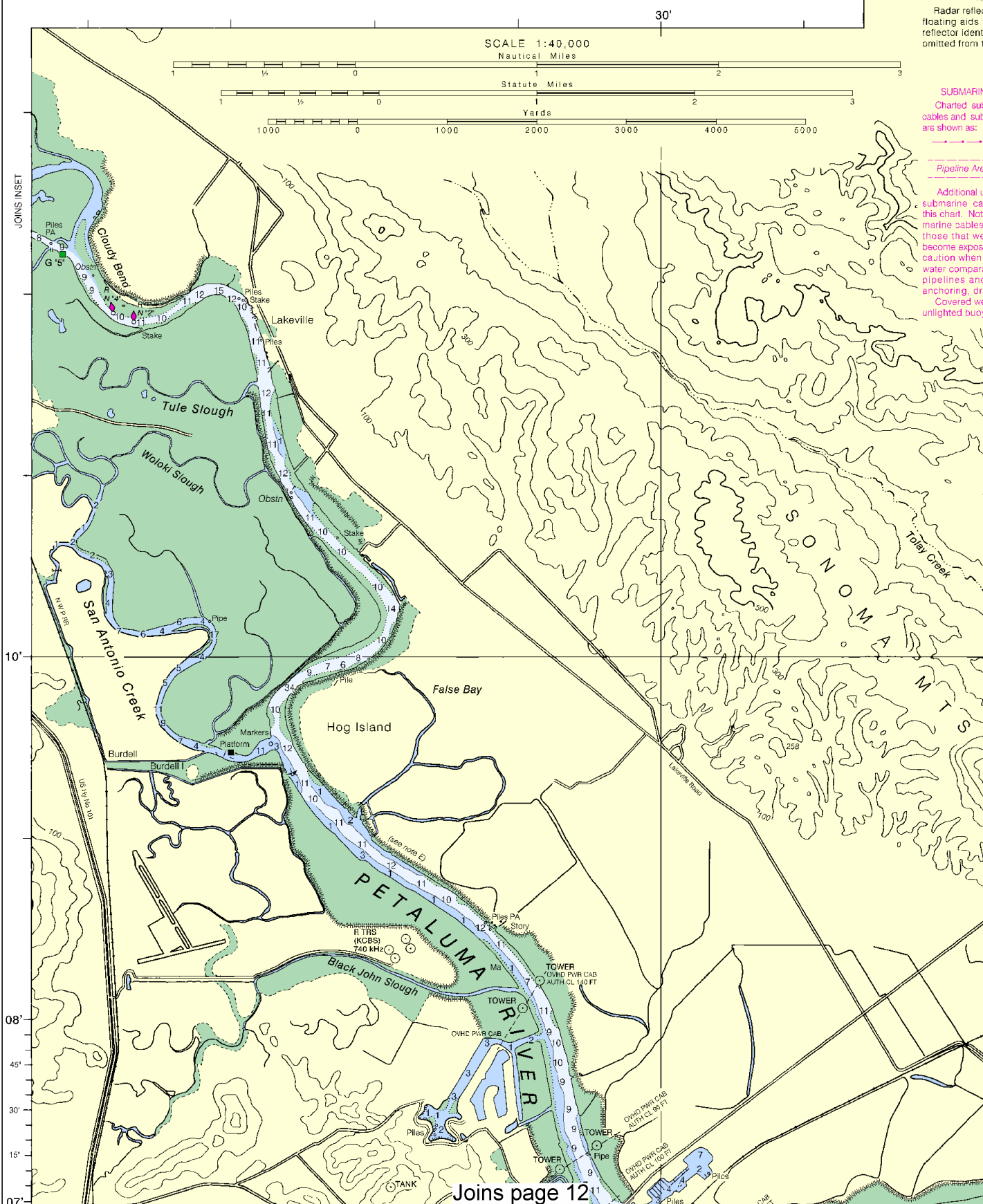
# SOUNDINGS IN FEET

18654



This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 0510 2/2/2010,  
 NGA Weekly Notice to Mariners: 0910 2/27/2010,  
 Canadian Coast Guard Notice to Mariners: n/a .

7



Joins page 12



facility if telephone communication is not available (33 CFR 153).

## RADAR REFLECTORS

lectors have been placed on many  
s to navigation. Individual radar  
identification on these aids has been  
n this chart.

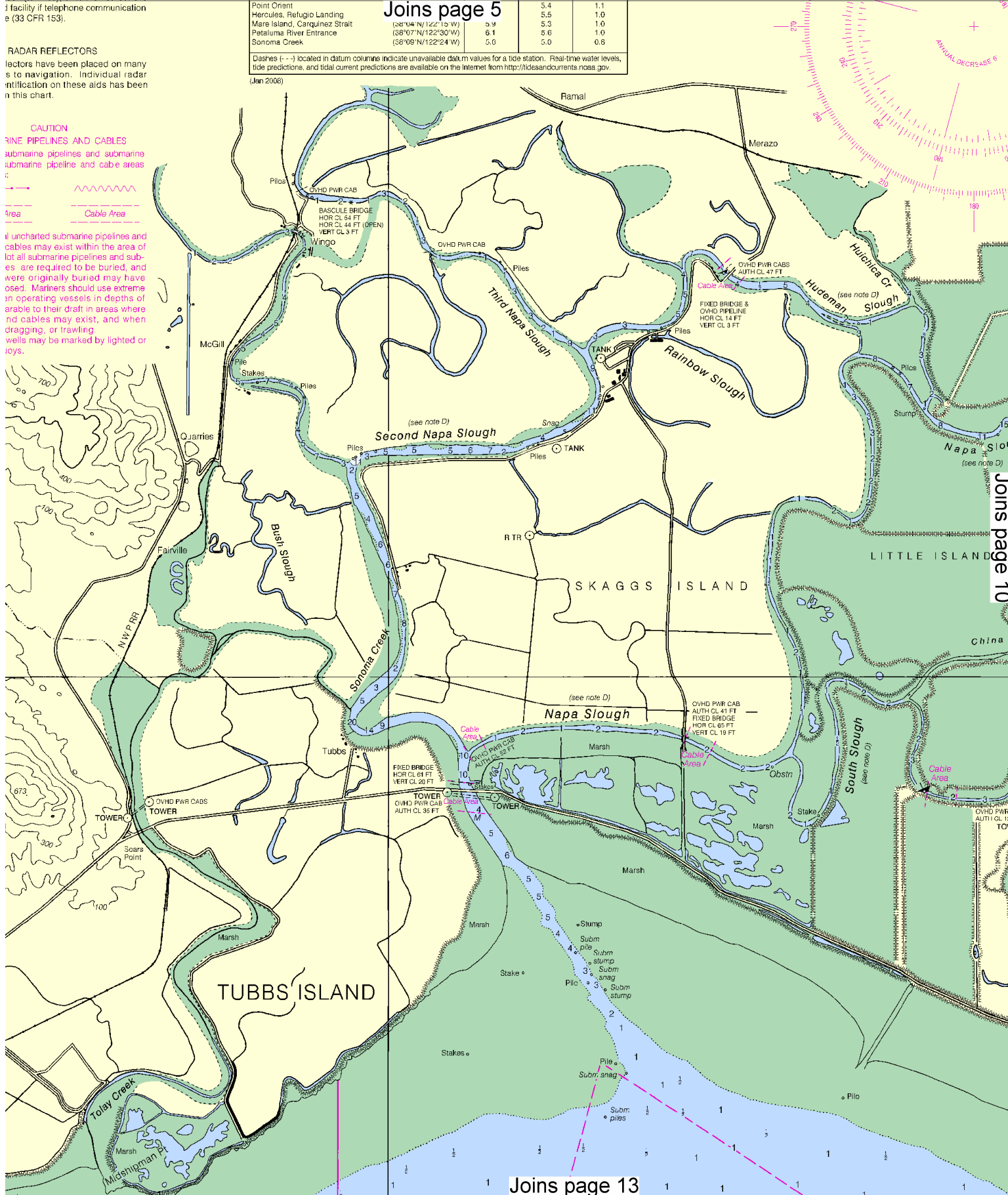
**CAUTION**

submarine pipelines and submarine  
submarine pipeline and cable areas  
;

if uncharted submarine pipelines and cables may exist within the area of lot all submarine pipelines and subes are required to be buried, and were originally buried may have used. Mariners should use extreme in operating vessels in depths of arable to their draft in areas where nd cables may exist, and when dragging, or trawling. wells may be marked by lighted on JOYS.

Point Orient	Joins page 5	5.4	1.1
Hercules, Refugee Landing		5.5	1.0
Mare Island, Carquinez Strait	(38°04'N/122°15'W)	5.9	5.3
Petaluma River Entrance	(38°07'N/122°30'W)	6.1	5.6
Sonoma Creek	(38°09'N/122°24'W)	5.0	5.0
			0.8

Dashes (- -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from <http://tidesandcurrents.noaa.gov>.  
(Jan 2008)

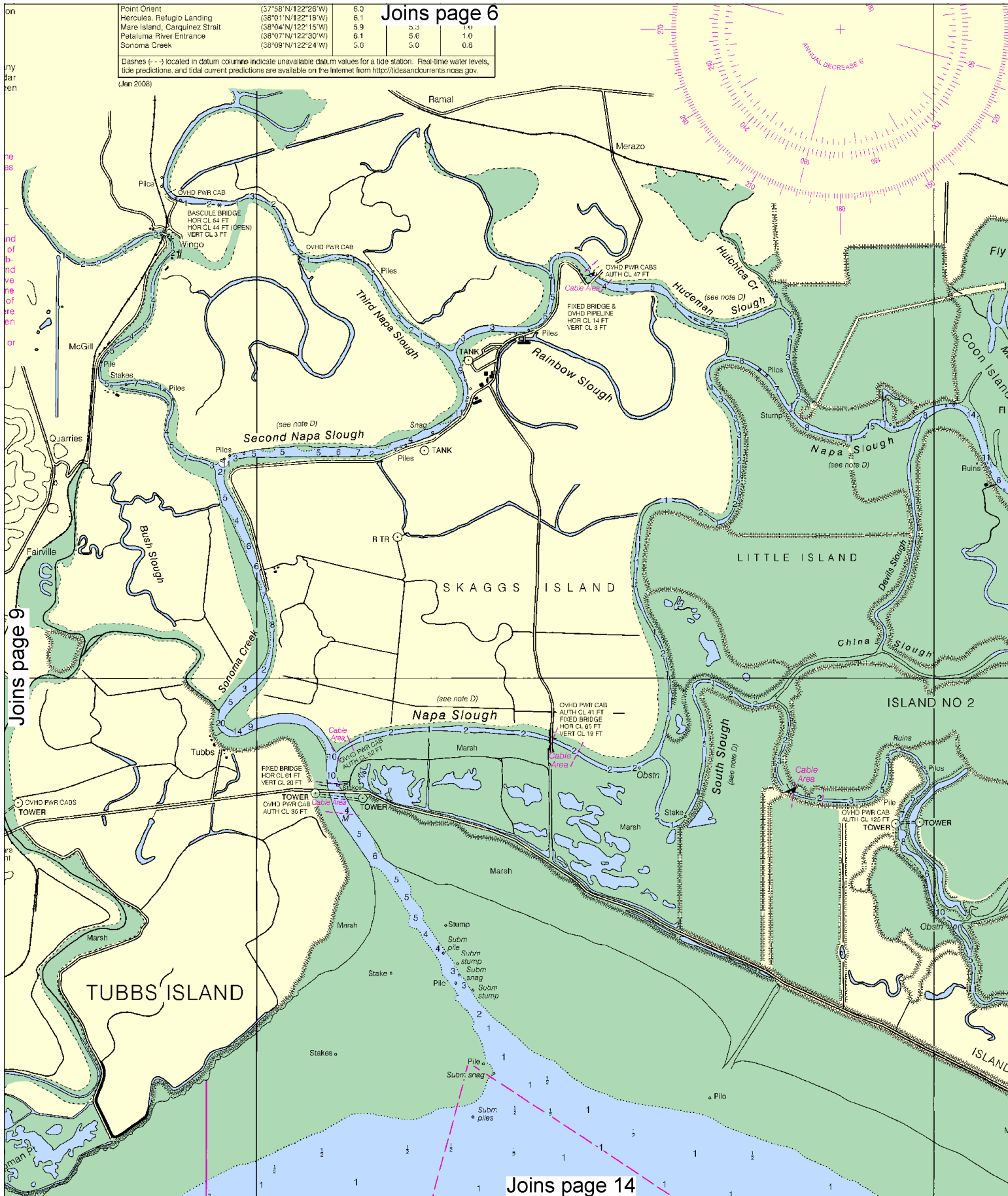


Point Orient	(37°58'N/122°26'W)	6.0		
Hercules, Refuge Landing	(38°01'N/122°18'W)	6.1	5.3	0.8
Mare Island, Carquinez Strait	(38°04'N/122°15'W)	5.9	5.6	1.0
Petaluma River Entrance	(38°07'N/122°30'W)	6.1	5.6	1.0
Sonoma Creek	(38°09'N/122°24'W)	5.0	5.0	0.5

Dashes (---) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the internet from <http://tidesandcurrents.noaa.gov> (Jan 2006)

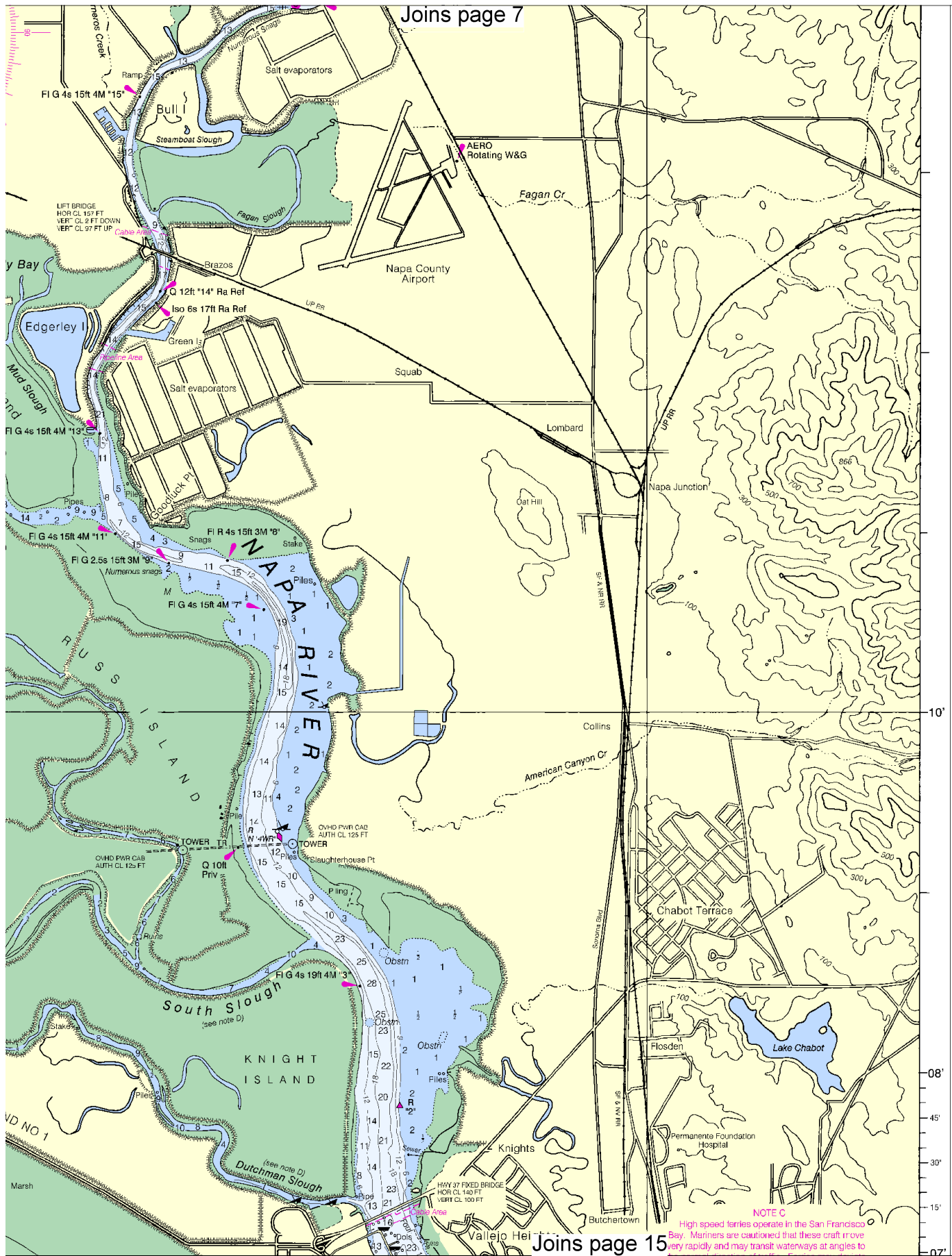
Joins page 6

Joins page 9



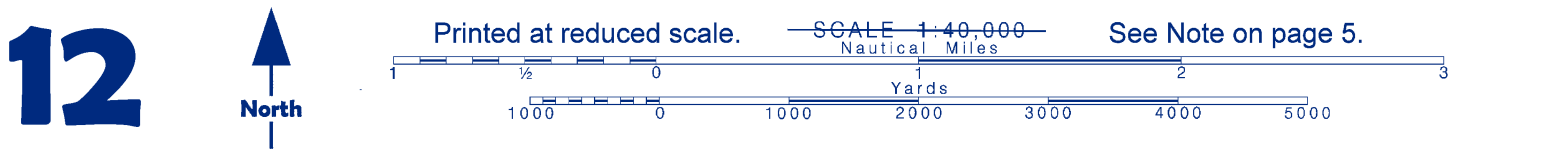


Joins page 7

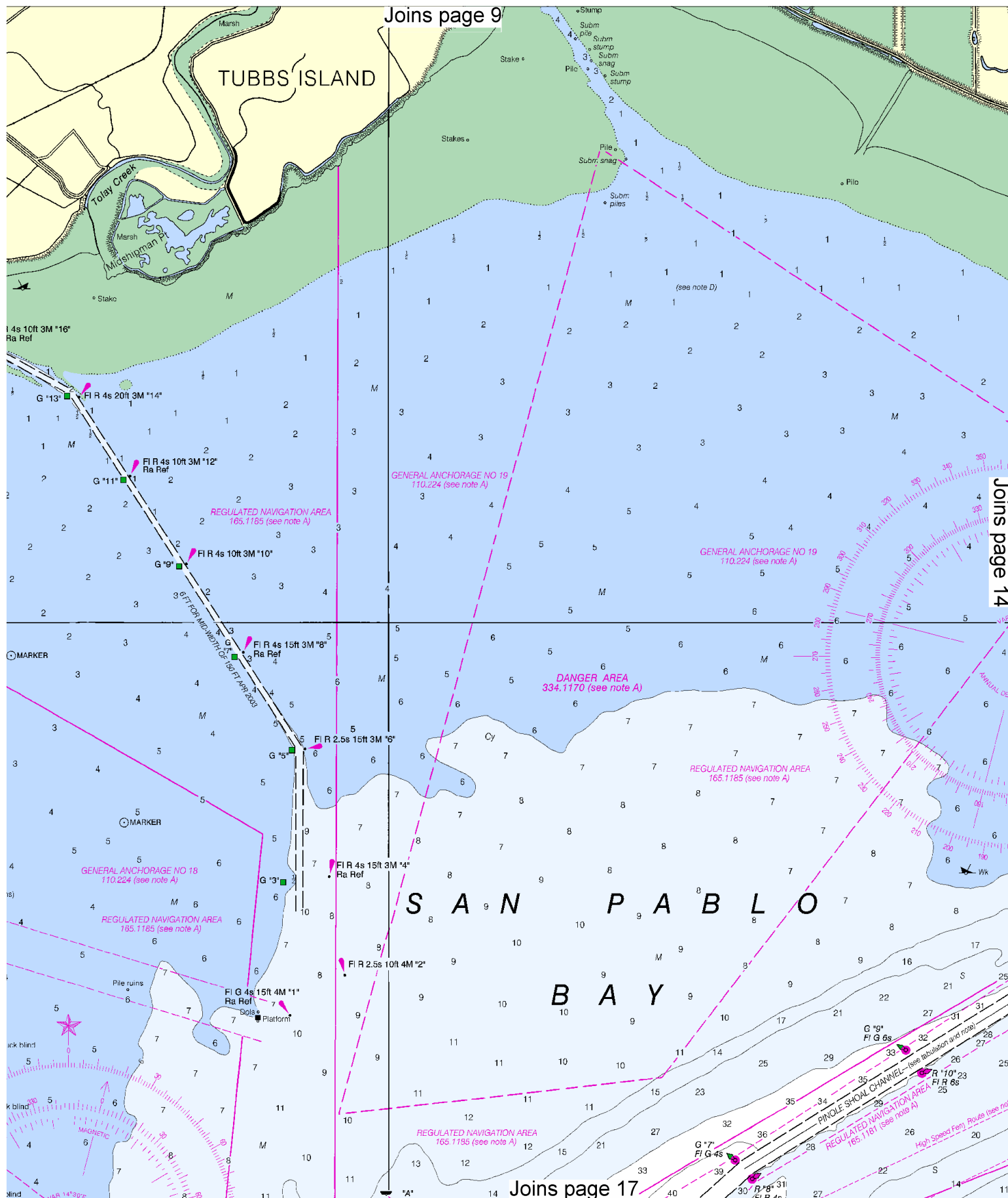


NOTE C

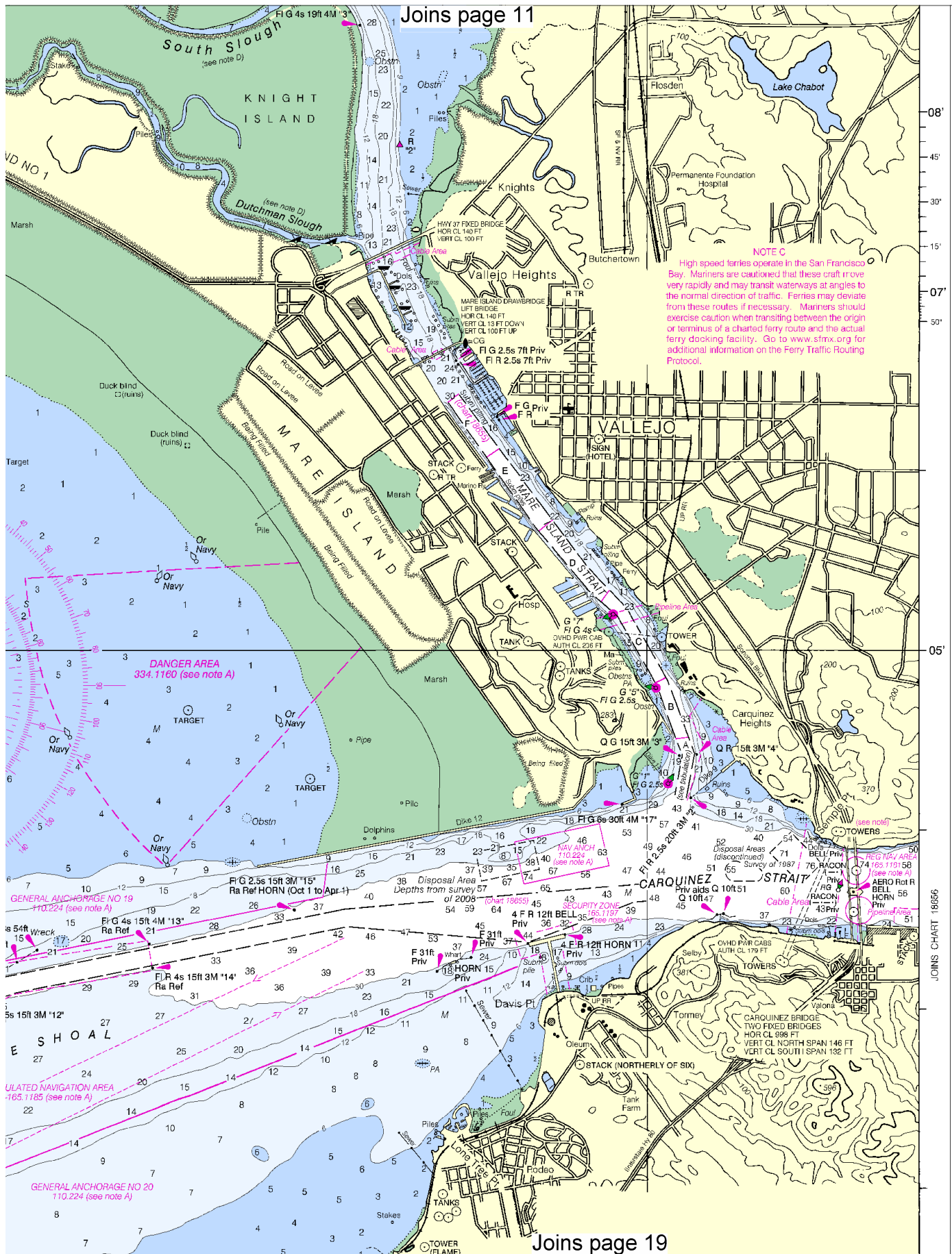
High speed ferries operate in the San Francisco Bay. Mariners are cautioned that these craft move very rapidly and may transit waterways at angles to



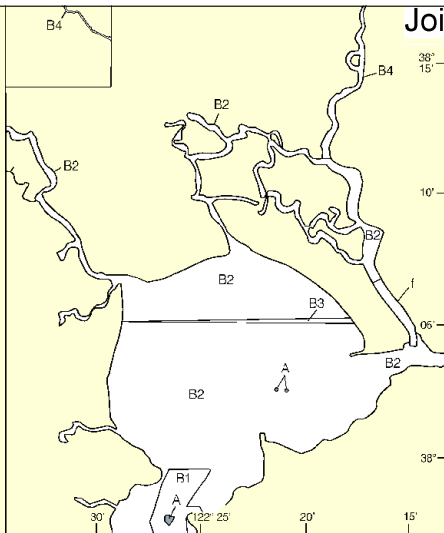








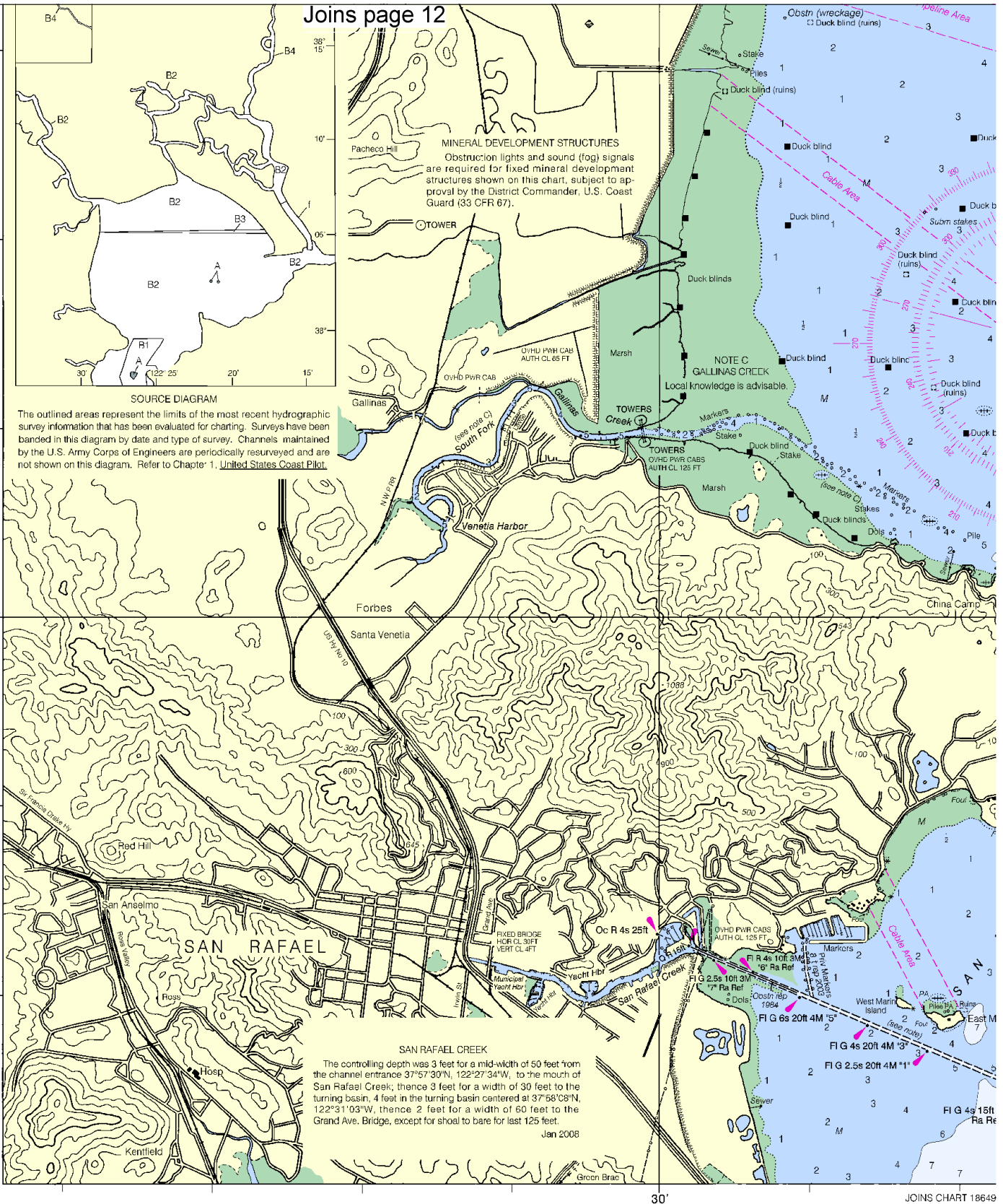




SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

**MINERAL DEVELOPMENT STRUCTURES**  
Obstruction lights and sound (fog) signals are required for fixed mineral development structures shown on this chart, subject to approval by the District Commander, U.S. Coast Guard (33 CFR 67).



44th Ed., Jan./08 ■ Corrected through NM Jan. 26/08  
Corrected through LNM Jan. 15/08

18654

**CAUTION**

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at [nauticalcharts.noaa.gov](http://nauticalcharts.noaa.gov).

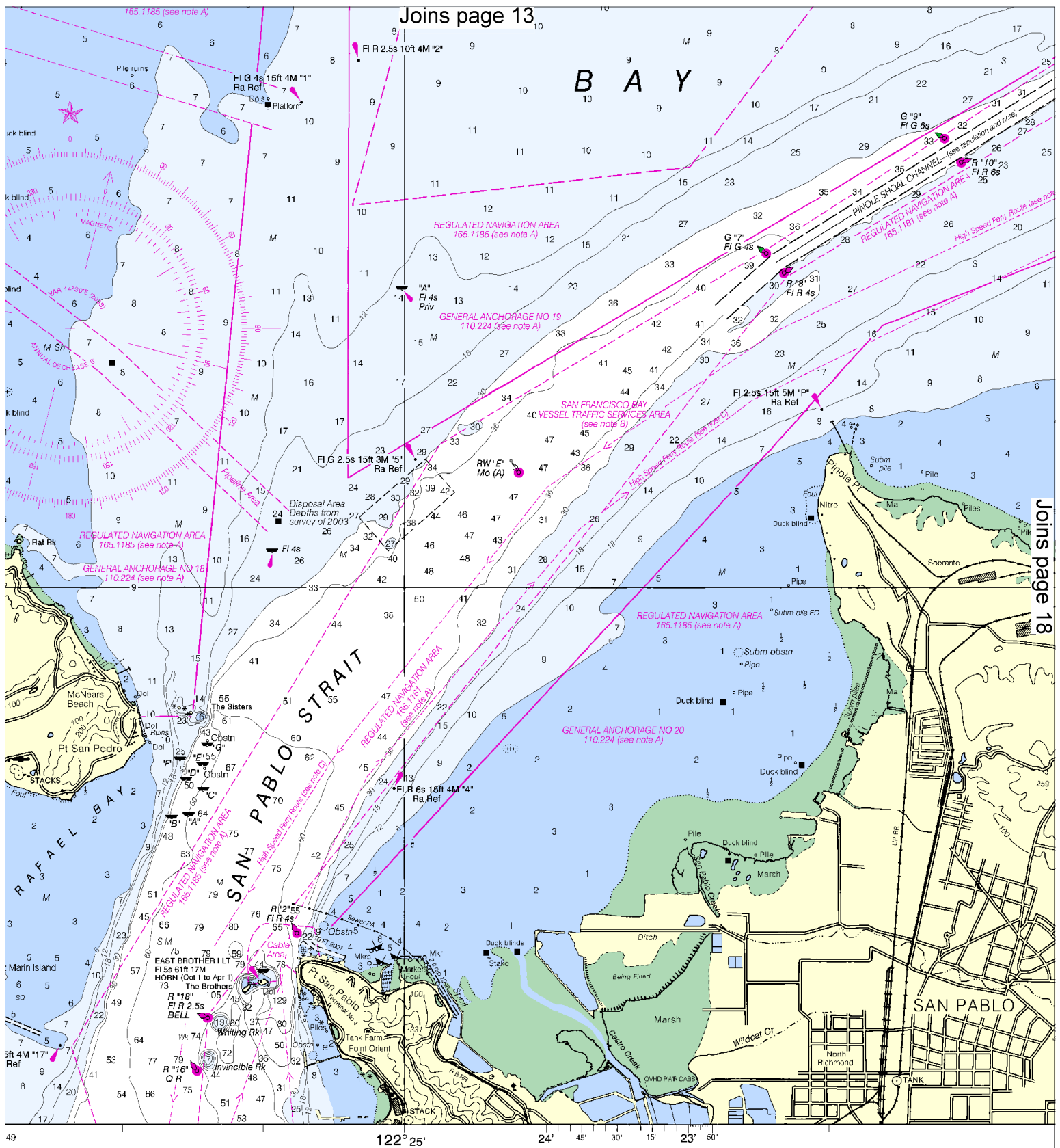


Printed at reduced scale.

SCALE 1:40,000  
Nautical Miles

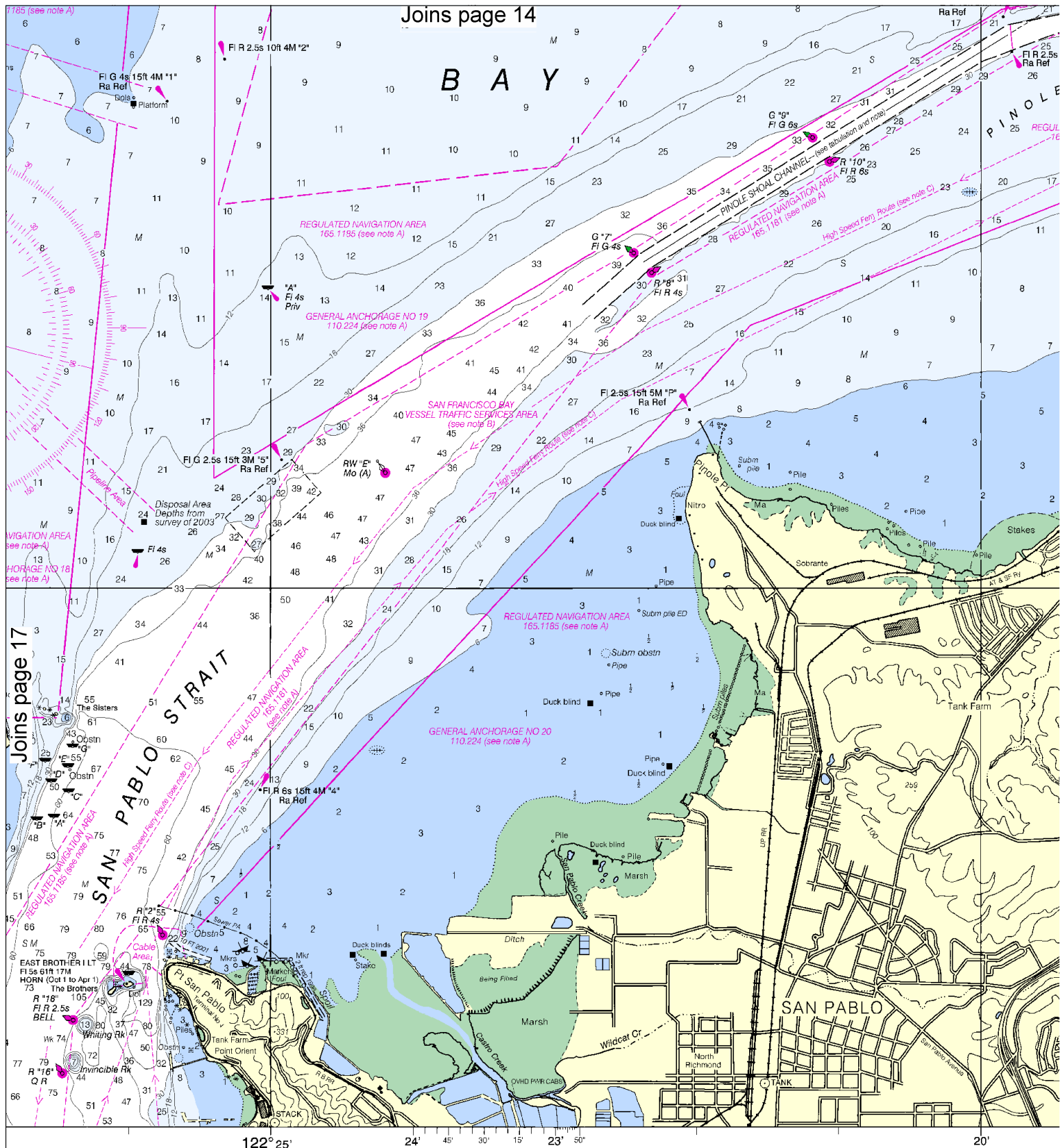
See Note on page 5.





SOUNDINGS IN FEET

Published at Washington, D.C.  
U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SERVICE  
COAST SURVEY



**DEPTHS IN FEET**

Published at Washington, D.C.  
U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SERVICE  
COAST SURVEY

FATHOMS
FEET
METERS

**18**



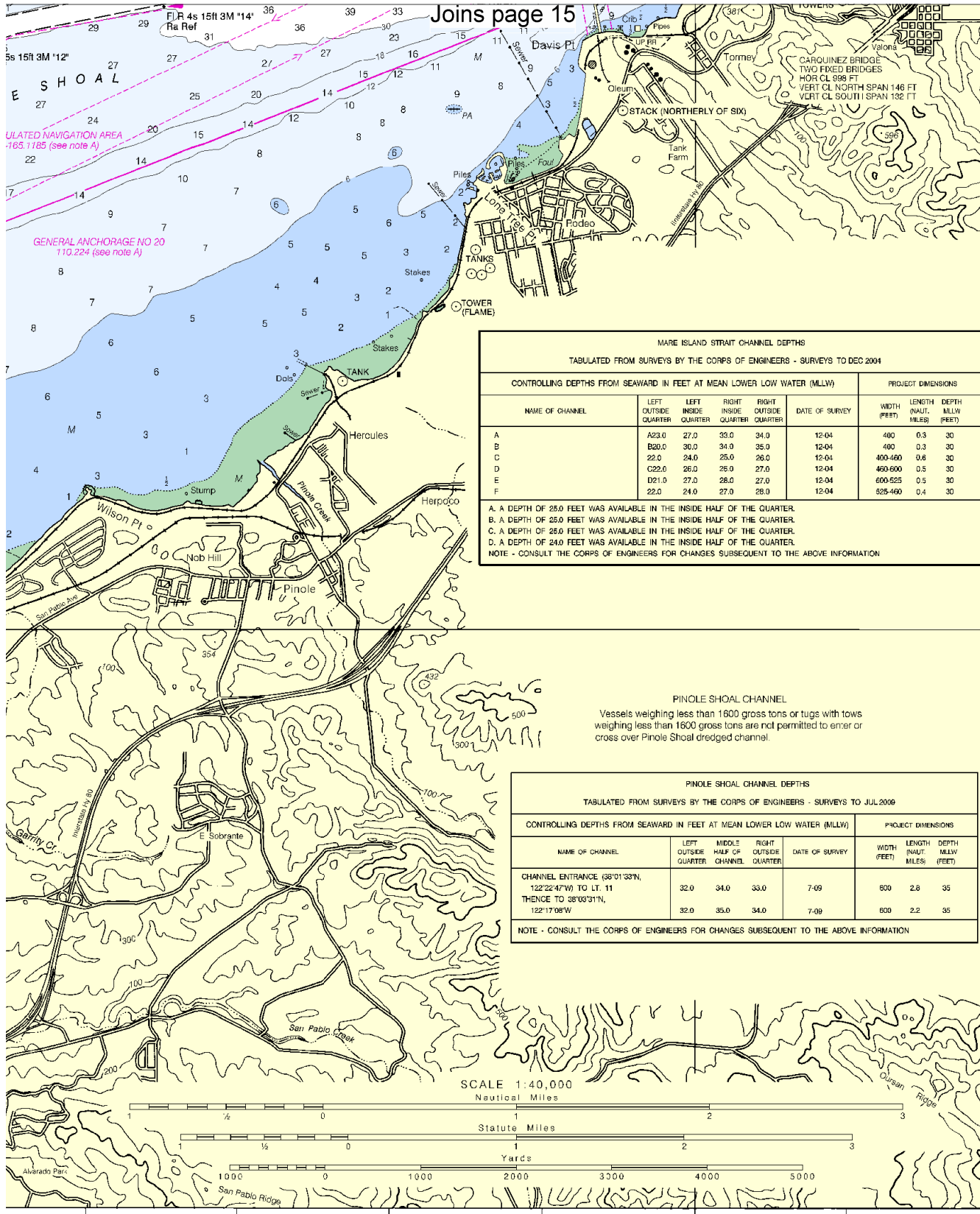
Printed at reduced scale.

SCALE 1:40,000  
Nautical Miles

See Note on page 5.





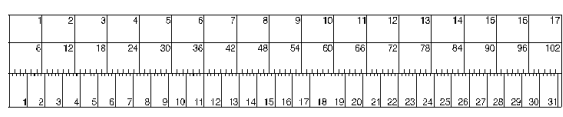


MARE ISLAND STRAIT CHANNEL DEPTHS							
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO DEC 2004							
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS	
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (NAUT. MILES)	LENGTH (NAUT. MILES)
A	A23.0	27.0	33.0	34.0	12-04	400	0.3
B	B20.0	30.0	34.0	35.0	12-04	400	0.3
C	22.0	24.0	25.0	26.0	12-04	400-460	0.6
D	C22.0	26.0	26.0	27.0	12-04	460-600	0.5
E	D21.0	27.0	28.0	27.0	12-04	600-525	0.5
F	22.0	24.0	27.0	28.0	12-04	525-460	0.4

A. A DEPTH OF 25.0 FEET WAS AVAILABLE IN THE INSIDE HALF OF THE QUARTER.  
B. A DEPTH OF 25.0 FEET WAS AVAILABLE IN THE INSIDE HALF OF THE QUARTER.  
C. A DEPTH OF 25.0 FEET WAS AVAILABLE IN THE INSIDE HALF OF THE QUARTER.  
D. A DEPTH OF 24.0 FEET WAS AVAILABLE IN THE INSIDE HALF OF THE QUARTER.  
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

PINOLE SHOAL CHANNEL DEPTHS							
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUL 2006							
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS	
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH (FEET)
CHANNEL ENTRANCE (38°01'30"N, 122°22'47"W) TO LT. 11	32.0	34.0	33.0	7-09	800	2.6	35
THENCE TO 38°03'31"N, 122°17'08"W	32.0	35.0	34.0	7-09	800	2.2	35

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION



San Pablo Bay  
SOUNDINGS IN FEET - SCALE 1:40,000

18654

ED. NO. 44  
NSN 7642014011525  
NGA REFERENCE NO. 18AHA18654

## EMERGENCY INFORMATION

### VHF Marine Radio channels for use on the waterways:

**Channel 6** – Inter-ship safety communications.

**Channel 9** – Communications between boats and ship-to-coast.

**Channel 13** – Navigation purposes at bridges, locks, and harbors.

**Channel 16 – Emergency, distress and safety calls** to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

**Channel 22A** – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

**Channels 68, 69, 71, 72 & 78A** – Recreational boat channels.

### Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

### **HAVE ALL PERSONS PUT ON LIFE JACKETS !!**

**Mobile Phones** – Call 911 for water rescue.

**Coast Guard Search & Rescue** – 510-437-3700

**Coast Guard San Francisco** – 415-399-3479

**Commercial Vessel Assistance** – 1-800-367-8222

**NOAA Weather Radio** – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

**Getting and Giving Help** – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



## NOAA CHARTING PUBLICATIONS

**Official NOAA Nautical Charts** – NOAA surveys and charts the national and territorial waters of the U.S., including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: [www.NauticalCharts.NOAA.gov](http://www.NauticalCharts.NOAA.gov).

**Official Print-on-Demand Nautical Charts** – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at [www.OceanGrafix.com](http://www.OceanGrafix.com).

**Official Electronic Navigational Charts (NOAA ENC<sup>®</sup>)** – ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at [www.NauticalCharts.NOAA.gov](http://www.NauticalCharts.NOAA.gov).

**Official Raster Navigational Charts (NOAA RNC<sup>™</sup>)** – RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at [www.NauticalCharts.NOAA.gov](http://www.NauticalCharts.NOAA.gov).

**Official BookletCharts<sup>™</sup>** – BookletCharts<sup>™</sup> are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is [www.NauticalCharts.gov/bookletcharts](http://www.NauticalCharts.gov/bookletcharts).

**Official PocketCharts<sup>™</sup>** – PocketCharts<sup>™</sup> are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

**Official U.S. Coast Pilot<sup>®</sup>** – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at [www.NauticalCharts.NOAA.gov](http://www.NauticalCharts.NOAA.gov).

**Official On-Line Chart Viewer** – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is [www.NauticalCharts.gov/viewer](http://www.NauticalCharts.gov/viewer).

**Official Nautical Chart Catalogs** – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to <http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm>.

**Internet Sites:** [www.NauticalCharts.NOAA.gov](http://www.NauticalCharts.NOAA.gov), [www.NOAA.gov](http://www.NOAA.gov), [www.TidesandCurrents.NOAA.gov](http://www.TidesandCurrents.NOAA.gov), [www.NOS.NOAA.gov](http://www.NOS.NOAA.gov).